

DOCKET SECTION

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268-0001

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FOR THE POSTAL RATE COMMISSION
OFFICE OF THE CONSUMER ADVOCATE

Postal Rate and Fee Changes, 1997

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Docket No. R97-1

ANSWERS OF THE OFFICE OF THE CONSUMER ADVOCATE
TO INTERROGATORIES OF UNITED STATES POSTAL SERVICE
WITNESS: ROGER SHERMAN (NAA/OCA-T300-1-6)
(FEBRUARY 3, 1998)

The Office of the Consumer Advocate hereby submits the answers of Roger Sherman to interrogatories NAA/OCA-T300-1-6, dated January 20, 1998. Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,



KENNETH E. RICHARDSON
Attorney
Office of the Consumer Advocate

ANSWERS OF OCA WITNESS ROGER SHERMAN
TO INTERROGATORIES NAA/OCA-T300-1-6

NAA/OCA-T300-1. Please refer to the statement at the bottom of page 5 of your direct testimony.

"If cross elasticities of demand are zero, *as is true for most subclasses of mail*, the Ramsey price takes an especially simple form..." (emphasis added)

- a. Please indicate the evidence upon which you based your conclusion that the elasticities of demand are zero for most subclasses of mail.
- b. If two subclasses of mail offered very similar services, is it reasonable to conclude that the cross elasticities of demand are zero? Please explain fully.
- c. Consider Standard A ECR mail and Standard A Regular mail. Both subclasses contain automated presorted letter mail. Is it reasonable to conclude that the cross elasticities of demand are zero for these two subclasses of mail? Please explain fully.

A. a. I did *not* conclude that elasticities of demand are zero for most subclasses of mail, and the quoted passage from my testimony does not say I do. In the quoted passage I say that most *cross* elasticities of demand are zero and I base that statement on the Postal Service demand estimates. (I acknowledge in Section 2.1, "Costs, Prices, Volumes and Demand Functions," at p. 7, that I rely on estimates of Postal Service witnesses Thress (USPS-T-7) and Musgrave (USPS-T-8)). Of the 21 subclasses I examined, a nonzero cross elasticity of demand was reported for only 6.

b. If two subclasses of mail offered services so similar in quality and price that one was a good substitute for the other, it would be reasonable to expect a positive cross elasticity between them. But whether a positive cross elasticity exists is an empirical question.

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c. I am in no position to judge whether Standard A ECR mail and Standard A Regular mail have nonzero cross elasticities of demand. I have not estimated demands or examined data that would bear on the question.

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NAA/OCA-T300-2. At page 17 of your direct testimony, you state that "[t]he Postal Service must serve goals beyond economic efficiency."

- a. In your view, what weight should these non-economic goals receive in the rate setting process?
- b. Did you consider what level of welfare loss is acceptable to achieve these non-economic goals of the Postal Reorganization Act? If so, please state the dollar amount of welfare loss that you find acceptable to meet the non-economic goals specified in the Act.

A. a. My view of the importance of noneconomic goals in statutory postal pricing guidelines does not seem relevant. As an economist my knowledge probably biases me toward economic goals I know about and I am not fully informed about the noneconomic goals the Postal Rate Commission must also evaluate.

b. I did not make any judgment about what economic loss is acceptable in order to achieve noneconomic goals. I attempted to estimate the economic losses that result when departures are made from Ramsey prices, without making a judgment as to what is acceptable.

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NAA/OCA-T300-3. Please refer to page 21 of your direct testimony. Assume that there is a positive and significant cross price elasticity between Standard A ECR mail and Standard A Regular mail. What effect would this cross elasticity of demand have on the "Pure Ramsey" results in Column (1) of your table?

A. The existence of positive cross elasticities of demand between Standard A ECR mail and Standard A Regular mail would ordinarily lead to increases in the pure Ramsey prices for both services. (To illustrate, start from prices for two services that would be appropriate without positive cross elasticities. Then have the positive cross elasticities come into existence. With those positive cross elasticities, increasing prices of both services will be beneficial because raising the price of each service will now increase the demand for the other.)

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NAA/OCA-T300-4. Please refer to page 26 of your direct testimony. You state that "[I]t should be noted that these estimates still depend on the demand functions that have been estimated and are assumed to hold." Is it reasonable to assume that the demand functions will hold when some of the average rates shown in Table 3, notably for Periodicals, are far in excess of the historic rates used to estimate the demand equations? Please explain your response fully.

A. The estimated demand functions for postal services generally afford a sound basis for predictions of responses to alternative prices. It is true that the predictions will be less reliable when they are based on prices outside the range of data used for the demand estimates. But it is reasonable to trace out the predictions as expected outcomes, even though they may be subject to greater error.

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NAA/OCA-T300-5. Please refer to page 41 of your direct testimony. You state:

"Cross elasticities lack this stabilizing property of own-price elasticities, because they simply intrude into other markets. When they are large they can overwhelm the own-price effects and prevent an equilibrium, which, in turn, can prevent the calculation of Ramsey prices."

- a. If there exist significant, positive cross elasticities of demand among two or more of the subclasses shown in Table 3 at page 21, could these cross elasticities prevent the calculation of Ramsey prices? Please explain why or why not.
- b. If the existence of significant, positive cross elasticities of demand prevented the calculation of Ramsey prices, how do you recommend setting the prices for the subclasses affected?

A. a. As long as the cross elasticities are smaller than the elasticities in absolute value, no problem should follow in reaching an equilibrium. The reason is that a service's own price performs an equilibrating role in its market. And as long as those own-price effects are larger (in absolute value) than cross-price effects, the own-price effects will produce an equilibrium. After all, when the price of a service rises, that discourages consumption of the service. This feedback in response to the price change tends to force moderation, or at least some limitation, on the price that can be set for the service in question, and that restraint moves the market toward an equilibrium, or a general solution that matches supplies and demands. When a price rises that affects consumption in some *other* market, there is no similar feedback. Because the effect is not where the price is adjusted, but instead is elsewhere, it does not force any limitation on the price being set. And if such cross-price effects are large, price changes in one market can throw off other markets where their effects are felt, and upset the general equilibrium among a set of markets.

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b. If cross elasticities are larger than own-price elasticities, no solution may be possible, unless the cross elasticities happen to balance each other in just the right way. Since we do not observe such situations in the world, we tend to expect cross elasticities will be smaller than own-price elasticities, and solutions will then be possible. It is also reasonable that a service's own price will affect its use more than will the price of some other service. We can obtain Ramsey prices in the conditions underlying Table 3. If cross elasticities were so large that a solution would not exist, we simply could not obtain Ramsey prices.

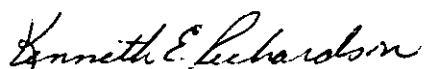
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NAA/OCA-T300-6. Are you recommending that the Commission adopt any form of Ramsey pricing in this proceeding? If so, please state specifically what you are recommending the Commission adopt in this proceeding.

A. My purpose was to review theoretical foundations for Postal Service pricing proposals, and to estimate the welfare cost of departing from Ramsey prices. I did not recommend a specific set of prices.

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the rules of practice.

A handwritten signature in cursive script, reading "Kenneth E. Richardson".

KENNETH E. RICHARDSON
Attorney

Washington, D.C. 20268-0001
February 3, 1998

DECLARATION

I, Roger Sherman, declare under penalty of perjury that the answers to interrogatories NAA/OCA-T300-1-6 of the Newspaper Association of America are true and correct, to the best of my knowledge, information and belief.

Executed 1/30/98

Roger Sherman